

## APPENDIX F

### Appendix F. Non-Consumptive Recreation: Preferred Alternative – Detailed Tables

Table

F.1.	Recreation Non-Consumptive Activities – Preferred Alternative – State waters – Santa Barbara County Step 1 Analysis
F.2.	Whale Watching – Preferred Alternative – State Waters – Santa Barbara County Step 1 Analysis
F.3.	Non-Consumptive Diving – Preferred Alternative – State Waters – Santa Barbara County Step 1 Analysis
F.4.	Kayaking – Preferred Alternative – State Waters – Santa Barbara County Step 1 Analysis
F.5.	Recreation Non-Consumptive Activities – Preferred Alternative – State waters – Ventura County Step 1 Analysis
F.6.	Whale Watching – Preferred Alternative – State Waters – Ventura County Step 1 Analysis
F.7.	Non-Consumptive Diving – Preferred Alternative – State Waters – Ventura County Step 1 Analysis
F.8.	Sailing – Preferred Alternative – State Waters – Ventura County Step 1 Analysis
F.9.	Kayaking – Preferred Alternative – State Waters – Ventura County Step 1 Analysis
F.10.	Recreation Non-Consumptive Activities – Preferred Alternative – State waters – Los Angeles County Step 1 Analysis
F.11.	Sailing – Preferred Alternative – State Waters – Los Angeles County Step 1 Analysis
F.12.	Non-Consumptive Diving – Preferred Alternative – State Waters – Los Angeles County Step 1 Analysis
F.13.	Recreation Non-Consumptive Activities – Preferred Alternative – Federal waters – Santa Barbara County Step 1 Analysis
F.14.	Whale Watching – Preferred Alternative – Federal Waters – Santa Barbara County Step 1 Analysis
F.15.	Non-Consumptive Diving – Preferred Alternative – Federal Waters – Santa Barbara County Step 1 Analysis
F.16.	Kayaking – Preferred Alternative – Federal Waters – Santa Barbara County Step 1 Analysis
F.17.	Recreation Non-Consumptive Activities – Preferred Alternative – Federal waters – Ventura County Step 1 Analysis
F.18.	Whale Watching – Preferred Alternative – Federal Waters – Ventura County Step 1 Analysis
F.19.	Non-Consumptive Diving – Preferred Alternative – Federal Waters – Ventura County Step 1 Analysis
F.20.	Sailing – Preferred Alternative – Federal Waters – Ventura County Step 1 Analysis
F.21.	Kayaking – Preferred Alternative – Federal Waters – Ventura County Step 1 Analysis
F.22.	Recreation Non-Consumptive Activities – Preferred Alternative – Federal waters – Los Angeles County Step 1 Analysis
F.23.	Sailing – Preferred Alternative – Federal Waters – Los Angeles County Step 1 Analysis
F.24.	Non-Consumptive Diving – Preferred Alternative – Federal Waters – Los Angeles County Step 1 Analysis

## APPENDIX F

Table F.1. Recreation Non-consumptive Activities - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

	Whale Watching		Non-consumptive Diving		Kayaking/Sightseeing	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	547	6.6%	730	16.2%	340	29.1%
Market Impact						
Direct Sales	\$ 87,684	6.6%	\$ 107,724	16.2%	\$ 71,882	29.1%
Direct Wages and Salaries	\$ 43,190	6.6%	\$ 52,659	16.2%	\$ 36,149	29.1%
Direct Employment	2	6.6%	2	16.2%	1	29.1%
Total Income						
Upper Bound	\$ 75,583	6.6%	\$ 92,154	16.2%	\$ 63,262	29.1%
Lower Bound	\$ 64,785	6.6%	\$ 78,989	16.2%	\$ 54,224	29.1%
Total Employment						
Upper Bound	3	6.7%	3	16.6%	2	27.7%
Lower Bound	2	6.6%	3	16.5%	2	30.8%
Non-Market Impact						
Consumer's Surplus	\$ 6,328	6.6%	\$ 8,453	16.2%	\$ 3,932	29.1%
Profit <sup>1</sup>	\$ 5,803	6.6%	\$ 1,582	16.2%	\$ 736	29.1%

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.2. Whale Watching - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure		Wages to Sales		Wages to Employment	
	Per Person Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00	28,967	0.232375514	6,731	14,246	0.5
Eating & Drinking	29.00	15,850	0.174582272	2,767	11,194	0.2
Transportation	10.00	5,465	0.170880464	934	21,624	0.0
Charter Boat fee	53.43	29,204	0.239509323	6,995	12,918	0.5
Miscellaneous	15.00	8,198	0.231621184	1,899	20,200	0.1
Total	160.43	<b>87,684</b>		<b>19,326</b>		<b>1.4</b>
Total Income to Wages & Salary	2.234846794			Total Direct Income <sup>1</sup> 43,190		Total Direct Employment <sup>2</sup> 1.7
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>64,785</b> Lower		<b>2.2</b>
Upper 2.5			Upper	<b>75,583</b> Upper		<b>2.6</b>
Proprietors Income to Total Income by Work	0.188784335			% County by Place of Work		% County 0.000%
Proprietors Income to Employment	23974.67315			0.001%		
Regional Employment Multiplier				% County by Place of Residence		
Lower 1.5						
Upper 2.0				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX F

Table F.3. Nonconsumptive Diving - Preferred Alterantive - State Waters - Santa Barbara County Step 1 Analysis

Table 1.5: Nonconsumptive Driving - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis							
	Expenditure	Wages to		Wages to			
	Per Person		Sales		Employment		
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment	
Lodging	53.00	38,692	0.23237551	8,991	14,246		0.6
Eating & Drinking	29.00	21,171	0.17458227	3,696	11,194		0.3
Transportation	10.00	7,300	0.17088046	1,247	21,624		0.1
Charter Boat fee	40.56	29,610	0.23950932	7,092	12,918		0.5
Miscellaneous	15.00	10,951	0.23162118	2,536	20,200		0.1
Total	147.56	107,724		23,563			1.7
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>	
Wages & Salary	2.234846794			52,659			2.1
Regional Income							
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>	
Lower 2.0			Lower	78,989	Lower		2.6
Upper 2.5			Upper	92,154	Upper		3.2
Proprietors Income to							
Total Income by Work	0.188784335			% County by	% County		
Proprietors Income				Place of Work			0.000%
to Employment	23974.67315			0.001%			
Regional Employment							
Multiplier							
Lower 1.5				% County by			
Upper 2.0				Place of Residence			
				0.001%			

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.4. Kayaking - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to	
	Per Person	Total Expenditures \$	Sales	Wages & Salary	Employment	Ratio
	Per Day \$		Ratio			
Lodging	53.00	17,998	0.232375514	4,182	14,246	0.3
Eating & Drinking	29.00	9,848	0.174582272	1,719	11,194	0.2
Transportation	10.00	3,396	0.170880464	580	21,624	0.0
Charter Boat fee	104.67	35,546	0.239509323	8,514	12,918	0.7
Miscellaneous	15.00	5,094	0.231621184	1,180	20,200	0.1
<b>Total</b>	<b>211.67</b>	<b>71,882</b>		<b>16,175</b>		<b>1.2</b>
Total Income to				Total Direct Income <sup>1</sup>	Total Direct Employment <sup>2</sup>	
Wages & Salary	2.234846794			36,149	1.5	
Regional Income				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Multiplier						
Lower 2.0			Lower	<b>54,224</b>	Lower	<b>1.8</b>
Upper 2.5			Upper	<b>63,262</b>	Upper	<b>2.2</b>
Proprietors Income to				% County by	% County	
Total Income by Work	0.188784335			Place of Work	0.000%	
Proprietors Income						
to Employment	23974.67315			0.001%		
Regional Employment				% County by		
Multiplier				Place of Residence		
Lower 1.5						
Upper 2.0				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $x\alpha$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.  
 $\beta$  = Ratio of proprietors income to total income by work.  
 $\gamma$  = Ratio of proprietors income to employment.  
 $\mu''$  = Regional income multipliers (upper and lower range).  
 $\delta''$  = Regional employment multipliers (upper and lower range).  
 $x$ =Wages and salaries  
 $y$ =employment  
 $X$ =Direct wages and salaries  
 $Y$ =Direct Employment

## APPENDIX F

Table F.5. Recreation Non-consumptive Activities - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

	Whale Watching		NC Diving		Sailing		Kayaking/Sightseeing	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	3,240	18.3%	1,235	20.5%	395	10.6%	18	27.0%
<b>Market Impact</b>								
Direct Sales	\$ 541,750	18.3%	\$ 233,212	20.5%	\$ 66,770	10.6%	\$ 2,765	27.0%
Direct Wages and Salaries	\$ 261,852	18.3%	\$ 114,112	20.5%	\$ 32,310	10.6%	\$ 1,328	27.0%
Direct Employment	8	18.3%	4	20.5%	1	10.6%	0.04	27.0%
<b>Total Income</b>								
Upper Bound	\$ 458,241	18.3%	\$ 199,696	20.5%	\$ 56,543	10.6%	\$ 2,324	27.0%
Lower Bound	\$ 392,778	18.3%	\$ 171,168	20.5%	\$ 48,465	10.6%	\$ 1,992	27.0%
<b>Total Employment</b>								
Upper Bound	13	18.3%	5	20.6%	2	10.4%	0.1	#DIV/0!
Lower Bound	11	18.4%	4	20.3%	1	10.8%	0.1	#DIV/0!
<b>Non-Market Impact</b>								
Consumer's Surplus	\$ 37,520	18.3%	\$ 14,304	20.5%	\$ 4,575	10.6%	\$ 203	27.0%
Profit <sup>1</sup>	\$ 12,706	18.3%	\$ 6,569	20.5%	\$ 881	10.6%	\$ 63	27.0%

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.6. Whale Watching - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	171,742	0.213109652	36,600	14,138	2.6
Eating & Drinking	29.00	93,972	0.167627006	15,752	11,507	1.4
Transportation	10.00	32,404	0.166580417	5,398	21,582	0.3
Charter Boat fee	60.19	195,027	0.229005998	44,662	24,860	1.8
Miscellaneous	15.00	48,606	0.197079821	9,579	26,686	0.4
<b>Total</b>	<b>167.19</b>	<b>541,750</b>		<b>111,991</b>		<b>6.4</b>
<b>Total Income to</b>						
Wages & Salaries	2.338143047			Total Direct Income <sup>1</sup> 261,852		Total Direct Employment <sup>2</sup> 8.4
<b>Regional Income</b>						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>392,778</b>	Lower	<b>10.5</b>
Upper 2.5			Upper	<b>458,241</b>	Upper	<b>12.6</b>
<b>Proprietors Income to</b>						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income to Employment	21027.31293			Place of Work		0.013%
<b>Regional Employment</b>						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.002%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.7. Nonconsumptive Diving - Preferred Alterantive - State Waters - Ventura County Step 1 Analysis

	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00	65,473	0.21310965	13,953	14,138	1.0
Eating & Drinking	29.00	35,825	0.16762701	6,005	11,507	0.5
Transportation	10.00	12,353	0.16658042	2,058	21,582	0.1
Charter Boat fee	81.78	101,030	0.229006	23,136	24,860	0.9
Miscellaneous	15.00	18,530	0.19707982	3,652	26,686	0.1
Total	188.78	233,212		48,804		2.7
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			114,112		3.6
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	171,168	Lower	4.5
Upper 2.5			Upper	199,696	Upper	5.3
Proprietors Income to						
Total Income by Work	0.164550026			% County by	% County	
Proprietors Income				Place of Work		0.005%
to Employment	21027.31293			0.002%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.8. Sailing - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure	Total Expenditures \$	Wages to	Wages & Salary	Wages to	Employment
	Per Person Per Day \$		Sales Ratio		Employment Ratio	
Lodging	53.00	20,940	0.213109652	4,463	14,138	0.3
Eating & Drinking	29.00	11,458	0.167627006	1,921	11,507	0.2
Transportation	10.00	3,951	0.166580417	658	21,582	0.0
Charter Boat fee	61.99	24,494	0.229005998	5,609	24,860	0.2
Miscellaneous	15.00	5,927	0.197079821	1,168	26,686	0.0
<b>Total</b>	<b>168.99</b>	<b>66,770</b>		<b>13,819</b>		<b>0.8</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			32,310		1.0
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>48,465</b>	Lower	<b>1.3</b>
Upper 2.5			Upper	<b>56,543</b>	Upper	<b>1.6</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by	% County	
Proprietors Income				Place of Work		0.002%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.9. Kayaking - Preferred Alterantive - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00	929	0.213109652	198	14,138	0.0
Eating & Drinking	29.00	508	0.167627006	85	11,507	0.0
Transportation	10.00	175	0.166580417	29	21,582	0.0
Charter Boat fee	50.77	890	0.229005998	204	24,860	0.0
Miscellaneous	15.00	263	0.197079821	52	26,686	0.0
<b>Total</b>	<b>157.77</b>	<b>2,765</b>		<b>568</b>		<b>0.0</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			1,328		0.0
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>1,992</b>	Lower	<b>0.1</b>
Upper 2.5			Upper	<b>2,324</b>	Upper	<b>0.1</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.000%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment



## APPENDIX F

Table F.10. Recreation Non-consumptive Activities - Preferred Alternative - State Waters - LA County Step 1 Analysis

	Sailing		Non-consumptive Diving	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	45	15.8%	7	2.8%
Market Impact				
Direct Sales	\$ 10,107	15.8%	\$ 1,598	2.8%
Direct Wages and Salaries	\$ 3,369	15.8%	\$ 517	2.8%
Direct Employment	0.11	15.8%	0.02	2.8%
Total Income				
Upper Bound	\$ 5,895	15.8%	\$ 905	2.8%
Lower Bound	\$ 5,053	15.8%	\$ 775	2.8%
Total Employment				
Upper Bound	0.17	15.8%	0.03	2.8%
Lower Bound	0.14	15.9%	0.03	2.8%
Non-Market Impact				
Consumer's Surplus	\$ 521	15.8%	\$ 81	2.8%
Profit <sup>1</sup>	\$ 1,537	15.8%	\$ 127	2.8%

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.11. Sailing - Preferred Alternative - State Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure Per Person	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	2,385	0.20181569	481	16,113	0.0
Eating & Drinking	29.00	1,305	0.17046229	222	12,333	0.0
Transportation	10.00	450	0.11940857	54	19,952	0.0
Charter Boat fee	117.61	5,292	0.20553955	1,088	28,630	0.0
Miscellaneous	15.00	675	0.26826126	181	29,734	0.0
Total	224.61	10,107		2,026		0.1
Total Income to Wages & Salary	1.662507805			Total Direct Income <sup>1</sup> 3,369		Total Direct Employment <sup>2</sup> 0.1
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	5,053	Lower	0.1
Upper 2.5			Upper	5,895	Upper	0.2
Proprietors Income to Total Income by Work	0.144206695			% County by Place of Work	% County	0.00000001%
Proprietors Income to Employment	26601.36574			0.000003%		
Regional Employment Multiplier				% County by Place of Residence		
Lower 1.5						0.000002%
Upper 2.0						

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.12. Nonconsumptive Diving - Preferred Alterantive - State Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to		Employment
	Per Person	Total Expenditures \$	Sales	Ratio	Employment	Ratio	
Lodging	92.00		641	0.20181569	129	16,113	0.0
Eating & Drinking	64.00		446	0.17046229	76	12,333	0.0
Transportation	10.00		70	0.11940857	8	19,952	0.0
Charter Boat fee	48.48		338	0.20553955	69	28,630	0.0
Miscellaneous	15.00		104	0.26826126	28	29,734	0.0
Total	229.48	<b>1,598</b>			<b>311</b>		<b>0.0</b>
Total Income to			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>		
Wages & Salary	1.662507805		517		0.0		
Regional Income			Total Income <sup>3</sup>		Total Employment <sup>4</sup>		
Multiplier							
Lower 2.0			Lower		775 Lower		0.0
Upper 2.5			Upper		905 Upper		0.0
Proprietors Income to			% County by		% County		
Total Income by Work	0.144206695		Place of Work		0.00000000%		
Proprietors Income			0.000000%				
to Employment	26601.36574						
Regional Employment			% County by				
Multiplier			Place of Residence				
Lower 1.5							
Upper 2.0			0.000000%				

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.13. Recreation Non-consumptive Activities - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

	Whale Watching		Non-consumptive Diving		Kayaking/Sightseeing	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	23	0.3%	59	1.3%	-	0.0%
Market Impact						
Direct Sales	\$ 3,638	0.3%	\$ 8,662	1.3%	\$ -	0.0%
Direct Wages and Salaries	\$ 1,792	0.3%	\$ 4,235	1.3%	\$ -	0.0%
Direct Employment	0	0.3%	0	1.3%	-	0.0%
Total Income						
Upper Bound	\$ 3,136	0.3%	\$ 7,410	1.3%	\$ -	0.0%
Lower Bound	\$ 2,688	0.3%	\$ 6,352	1.3%	\$ -	0.0%
Total Employment						
Upper Bound	0	0.3%	0	1.3%	-	0.0%
Lower Bound	0	0.3%	0	1.3%	-	0.0%
Non-Market Impact						
Consumer's Surplus	\$ 263	0.3%	\$ 680	1.3%	\$ -	0.0%
Profit <sup>1</sup>	\$ 241	0.3%	\$ 127	1.3%	\$ -	0.0%

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.14. Whale Watching - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person	Total Expenditures \$	Wages to Sales		Wages to Employment	
	Per Day \$		Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00	1,202	0.232375514	279	14,246	0.0
Eating & Drinking	29.00	658	0.174582272	115	11,194	0.0
Transportation	10.00	227	0.170880464	39	21,624	0.0
Charter Boat fee	53.43	1,212	0.239509323	290	12,918	0.0
Miscellaneous	15.00	340	0.231621184	79	20,200	0.0
Total	160.43	<b>3,638</b>		<b>802</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.234846794			1,792		0.1
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>2,688</b> Lower		<b>0.1</b>
Upper 2.5			Upper	<b>3,136</b> Upper		<b>0.1</b>
Proprietors Income to						
Total Income by Work	0.188784335			% County by		% County
Proprietors Income				Place of Work		0.000%
to Employment	23974.67315			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX F

Table F.15. Nonconsumptive Diving - Preferred Alterantive - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure	Wages to		Wages to		Employment
	Per Person Per Day \$	Total Expenditures \$	Sales Ratio	Wages & Salary	Employment Ratio	
Lodging	53.00	3,111	0.23237551	723	14,246	0.1
Eating & Drinking	29.00	1,702	0.17458227	297	11,194	0.0
Transportation	10.00	587	0.17088046	100	21,624	0.0
Charter Boat fee	40.56	2,381	0.23950932	570	12,918	0.0
Miscellaneous	15.00	881	0.23162118	204	20,200	0.0
Total	147.56	<b>8,662</b>		<b>1,895</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>	Total Direct Employment <sup>2</sup>	
Wages & Salary	2.234846794			4,235		0.2
Regional Income						
Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0			Lower	<b>6,352</b>	Lower	<b>0.2</b>
Upper 2.5			Upper	<b>7,410</b>	Upper	<b>0.3</b>
Proprietors Income to						
Total Income by Work	0.188784335			% County by	% County	
Proprietors Income				Place of Work		0.000%
to Employment	23974.67315			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.16. Kayaking - Preferred Alterantive - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	0	0.232375514	0	14,246	0.0
Eating & Drinking	29.00	0	0.174582272	0	11,194	0.0
Transportation	10.00	0	0.170880464	0	21,624	0.0
Charter Boat fee	104.67	0	0.239509323	0	12,918	0.0
Miscellaneous	15.00	0	0.231621184	0	20,200	0.0
<b>Total</b>	<b>211.67</b>	<b>0</b>		<b>0</b>		<b>0.0</b>
Total Income to Wages & Salary	2.234846794			Total Direct Income <sup>1</sup> 0		Total Direct Employment <sup>2</sup> 0.0
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		0 Lower		0.0
Upper 2.5		Upper		0 Upper		0.0
Proprietors Income to Total Income by Work	0.188784335			% County by Place of Work		% County 0.000%
Proprietors Income to Employment	23974.67315			0.000%		
Regional Employment Multiplier				% County by Place of Residence		
Lower 1.5						
Upper 2.0				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.17. Recreation Non-consumptive Activities - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

	Whale Watching		NC Diving		Sailing		Kayaking/Sightseeing	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	295	1.7%	166	2.8%	59	1.6%	-	0.0%
Market Impact								
Direct Sales	\$ 49,376	1.7%	\$ 31,404	2.8%	\$ 9,897	1.6%	\$ -	0.0%
Direct Wages and Salaries	\$ 23,866	1.7%	\$ 15,366	2.8%	\$ 4,789	1.6%	\$ -	0.0%
Direct Employment	1	1.7%	0	2.8%	0	1.6%	-	0.0%
Total Income								
Upper Bound	\$ 41,765	1.7%	\$ 26,891	2.8%	\$ 8,381	1.6%	\$ -	0.0%
Lower Bound	\$ 35,799	1.7%	\$ 23,049	2.8%	\$ 7,184	1.6%	\$ -	0.0%
Total Employment								
Upper Bound	1	1.7%	1	2.8%	0	1.5%	-	#DIV/0!
Lower Bound	1	1.7%	1	2.7%	0	1.6%	-	#DIV/0!
Non-Market Impact								
Consumer's Surplus	\$ 3,420	1.7%	\$ 1,926	2.8%	\$ 678	1.6%	\$ -	0.0%
Profit <sup>1</sup>	\$ 1,158	1.7%	\$ 885	2.8%	\$ 131	1.6%	\$ -	0.0%

1. Profit is used as a proxy for producer's surplus.
2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.18. Whale Watching - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person	Wages to Sales		Wages to Employment		Employment
	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	
Lodging	53.00	15,653	0.213109652	3,336	14,138	0.2
Eating & Drinking	29.00	8,565	0.167627006	1,436	11,507	0.1
Transportation	10.00	2,953	0.166580417	492	21,582	0.0
Charter Boat fee	60.19	17,775	0.229005998	4,071	24,860	0.2
Miscellaneous	15.00	4,430	0.197079821	873	26,686	0.0
Total	167.19	49,376		<b>10,207</b>		<b>0.6</b>
Total Income to Wages & Salaries	2.338143047			Total Direct Income <sup>1</sup> 23,866		Total Direct Employment <sup>2</sup> 0.8
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		<b>35,799</b> Lower		<b>1.0</b>
Upper 2.5		Upper		<b>41,765</b> Upper		<b>1.2</b>
Proprietors Income to Total Income by Work	0.164550026			% County by Place of Work		% County 0.001%
Proprietors Income to Employment	21027.31293			0.000%		
Regional Employment Multiplier						
Lower 1.5				% County by Place of Residence		
Upper 2.0				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.  
 $\beta$  = Ratio of proprietors income to total income by work.  
 $\gamma$  = Ratio of proprietors income to employment.  
 $\mu$  = Regional income multipliers (upper and lower range).  
 $\delta$  = Regional employment multipliers (upper and lower range).  
 $x$ =Wages and salaries  
 $y$ =employment  
 $X$ =Direct wages and salaries  
 $Y$ =Direct Employment

## APPENDIX F

Table F.19. Nonconsumptive Diving - Preferred Alterantive - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure	Wages to		Wages to		Employment
	Per Person Per Day \$	Total Expenditures \$	Sales Ratio	Wages & Salary	Employment Ratio	
Lodging	53.00	8,817	0.21310965	1,879	14,138	0.1
Eating & Drinking	29.00	4,824	0.16762701	809	11,507	0.1
Transportation	10.00	1,664	0.16658042	277	21,582	0.0
Charter Boat fee	81.78	13,605	0.229006	3,116	24,860	0.1
Miscellaneous	15.00	2,495	0.19707982	492	26,686	0.0
Total	188.78	<b>31,404</b>		<b>6,572</b>		<b>0.4</b>
Total Income to				Total Direct Income <sup>1</sup>	Total Direct Employment <sup>2</sup>	
Wages & Salary	2.338143047			15,366		0.5
Regional Income						
Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0		Lower		<b>23,049</b>	Lower	<b>0.6</b>
Upper 2.5		Upper		<b>26,891</b>	Upper	<b>0.7</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by	% County	
Proprietors Income				Place of Work		0.001%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.20. Sailing - Preferred Alterantive - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure	Total Expenditures \$	Wages to	Wages & Salary	Wages to	Employment
	Per Person Per Day \$		Sales Ratio		Employment Ratio	
Lodging	53.00	3,104	0.213109652	662	14,138	0.0
Eating & Drinking	29.00	1,698	0.167627006	285	11,507	0.0
Transportation	10.00	586	0.166580417	98	21,582	0.0
Charter Boat fee	61.99	3,631	0.229005998	831	24,860	0.0
Miscellaneous	15.00	879	0.197079821	173	26,686	0.0
Total	168.99	<b>9,897</b>		<b>2,048</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			4,789		0.2
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		<b>7,184</b> Lower		<b>0.2</b>
Upper 2.5		Upper		<b>8,381</b> Upper		<b>0.2</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.000%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment



## APPENDIX F

Table F.21. Kayaking - Preferred Alterantive - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00	0	0.213109652	0	14,138	0.0
Eating & Drinking	29.00	0	0.167627006	0	11,507	0.0
Transportation	10.00	0	0.166580417	0	21,582	0.0
Charter Boat fee	50.77	0	0.229005998	0	24,860	0.0
Miscellaneous	15.00	0	0.197079821	0	26,686	0.0
<b>Total</b>	<b>157.77</b>	<b>0</b>		<b>0</b>		<b>0.0</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			0		0.0
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>0</b> Lower		<b>0.0</b>
Upper 2.5			Upper	<b>0</b> Upper		<b>0.0</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.000%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX F

Table F.22. Recreation Non-consumptive Activities - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

	Sailing		Non-consumptive Diving	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	-	0.0%	-	0.0%
Market Impact				
Direct Sales	\$ -	0.0%	\$ -	0.0%
Direct Wages and Salaries	\$ -	0.0%	\$ -	0.0%
Direct Employment	-	0.0%	-	0.0%
Total Income				
Upper Bound	\$ -	0.0%	\$ -	0.0%
Lower Bound	\$ -	0.0%	\$ -	0.0%
Total Employment				
Upper Bound	-	0.0%	-	0.0%
Lower Bound	-	0.0%	-	0.0%
Non-Market Impact				
Consumer's Surplus	\$ -	0.0%	\$ -	0.0%
Profit <sup>1</sup>	\$ -	0.0%	\$ -	0.0%

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table F.23. Sailing - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure		Wages to Sales		Wages to Employment	
	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Lodging	53.00		0 0.20181569	0	16,113	0.0
Eating & Drinking	29.00		0 0.17046229	0	12,333	0.0
Transportation	10.00		0 0.11940857	0	19,952	0.0
Charter Boat fee	117.61		0 0.20553955	0	28,630	0.0
Miscellaneous	15.00		0 0.26826126	0	29,734	0.0
Total	224.61		0	0		0.0
Total Income to Wages & Salary	1.662507805			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Regional Income Multiplier						
Lower 2.0			Lower	0 Lower		0.0
Upper 2.5			Upper	0 Upper		0.0
Proprietors Income to Total Income by Work	0.144206695			% County by Place of Work		% County
Proprietors Income to Employment	26601.36574			0.000000%		0.00000000%
Regional Employment Multiplier						
Lower 1.5				% County by Place of Residence		
Upper 2.0				0.000000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX F

Table F.24. Nonconsumptive Diving - Preferred Alterantive - Federal Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to		Employment
	Per Person	Total Expenditures \$	Sales	Wages & Salary	Employment	Ratio	
Lodging	92.00		0	0.20181569	0	16,113	0.0
Eating & Drinking	64.00		0	0.17046229	0	12,333	0.0
Transportation	10.00		0	0.11940857	0	19,952	0.0
Charter Boat fee	48.48		0	0.20553955	0	28,630	0.0
Miscellaneous	15.00		0	0.26826126	0	29,734	0.0
Total	229.48		0		0		0.0
Total Income to			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>		
Wages & Salary	1.662507805		0		0.0		
Regional Income			Total Income <sup>3</sup>		Total Employment <sup>4</sup>		
Multiplier							
Lower 2.0			Lower		0 Lower		0.0
Upper 2.5			Upper		0 Upper		0.0
Proprietors Income to			% County by		% County		
Total Income by Work	0.144206695		Place of Work		0.00000000%		
Proprietors Income							
to Employment	26601.36574						
Regional Employment			% County by				
Multiplier			Place of Residence				
Lower 1.5							
Upper 2.0							

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment